

ABSTRACT

An antenna including a feed network; four or more helical radiating elements, and four or more impedance matching stubs each coupling a respective radiating element to ground in parallel with the feed network. The shunt stubs provide a reactance in parallel with the radiating elements to rotate the desired frequency locus about a constant admittance curve. Specifically, the shunt stubs rotate the desired frequency locus from a low resistance, capacitive impedance to 50 ohms purely resistive. The length of the stubs can be adjusted to control the inductance.